# Peaceful Nuclear Cooperation

U.S. Support for NPT Article IV

## **UNITED STATES & BANGLADESH**

International hrough Atomic Energy Agency (IAEA), the United States contributes to the work of many countries using nuclear materials and technology for peaceful purposes. In recent years, U.S. support has focused on achieving tangible and lasting benefits in fields that are vital to human development, including agriculture, human health, water resource management, and human resource development. Since 2000, the IAEA has approved and funded \$9,037,381, including \$444,583 2013. under its Technical Cooperation (TC) program for projects in Bangladesh.







The United States views its support for the peaceful uses of nuclear energy as a critical part of its efforts to strengthen the IAEA and the global nuclear nonproliferation regime. About 25% of the IAEA's annual budget for peaceful nuclear assistance comes from the U.S. In 2012, the U.S. contributed almost \$22 million to the Technical Cooperation Fund and over \$6 million in additional funding for training, fellowships, and cost-free experts.

In addition to these longstanding contributions to the IAEA's peaceful uses programs, at the 2010 NPT Review Conference, the U.S. announced a \$100 million Initiative to further expand this support over the next five years. The U.S. pledged \$50 million towards the IAEA's Peaceful Uses Initiative (PUI), focusing on human health, food security, water resource management, and nuclear power infrastructure The U.S. has already development. allocated over \$27 million to specific PUI projects, and welcomes the contributions of Japan, the Republic of Korea, New Zealand, the Czech Republic, Hungary, Sweden, Australia, France, Indonesia, Brazil, Italy, the UK, and Kazakhstan to this important Initiative.

### **NUCLEAR ENERGY**

An increasing number of Member States are considering nuclear power as part of their electricity generation options, and those Member States need comprehensive and credible information on nuclear power issues such as cost and benefit, energy security and environmental impact to support their decision making.

- Power plant under construction. Credit: Kansai Electric Power Co.
- 2. Standard maintenance check. Credit: Arthus
  -Bertrand
- 3. Sediment sampling for the study and control of pollutants. Credit: Dean Calma/IAEA

Bangladesh recently participated in a regional TC project supported by the United States that provided comprehensive information to Member States to support their decision making regarding nuclear power planning and development.

For the successful implementation of a sustainable nuclear power program in Bangladesh, it is necessary to develop technical and ample social infrastructure. Bangladesh therefore recently completed a national TC project supported by the United States to meet the requirement of human resource development including bid evaluation, contract preparation, document project management, finance, safety analysis, strengthening of regulatory and activities.

#### **NUCLEAR SAFETY**

Disused facilities and sites contaminated because of activities involving the use of radioactive material exist worldwide and many pose continuing health risks to adjacent communities and, potentially, to the wider public. Bangladesh is currently participating in an interregional TC project supported by the United States that will provide support and assistance toward the efficient clean-up of radioactive contaminated facilities and sites. Through this project, barriers to the acceptance of continued expanded applications of peaceful uses of nuclear technology can, to some extent, be removed.

Bangladesh also recently participated in a regional TC project supported by the United States to strengthen the remaining elements of its national regulatory framework for radiation safety to meet international safety standards as well as to establish a regional network of regulatory authorities to exchange information and share experiences.

#### **ENVIRONMENT**

Bangladesh is currently participating in a regional TC project supported by the United States to evaluate the extent and possible impact of the releases of radioactivity from the Fukushima Daiichi nuclear power plant into the environment and make scientific assessments of the data.

#### **HUMAN RESOURCES**

To contribute to Member States' manpower development, the IAEA awards individual fellowships and organizes group training courses. Every year, numerous fellows and training course participants travel to the United States for training in various peaceful uses of nuclear technology and return to their home country to apply the lessons learned.

Since 2000, the United States has hosted multiple training courses that included Bangladeshi participants in fields such as nuclear safety and

security, national long-range nuclear energy strategies, and insect pest control. Training was also provided through the IAEA Fellowship Program to 38 Bangladeshis, 11 of which were sponsored by the United States, in fields including research reactors, nuclear instrumentation, sustainable energy development, food irradiation, radiation medicine and health, and research reactor safety.

Additionally, since 2000, 20 U.S. experts have traveled to Bangladesh to collaborate through various IAEA Cooperation projects. Technical Examples of some topics include oncology, nuclear isotopes, standardization of protocol, and nuclear assessment.





- International radiation measurement exercise. Credit: Dean Calma/IAEA
- 2011 IAEA-Argonne workshop on the application of graded approach to research reactors. Credit: Argonne National Laboratory